IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Present Application:

Applicants : Sudhakar Kasina, John M. Reno, Alan R. Fritzberg and

Jonathan F. Tait

Title : RADIOLABELED ANNEXINS

Docket No. : 690022.525C7 Date : July 30, 2001

Prior Application:

Examiner : Unassigned

Art Unit : 1616

Application No.: 09/632,387

Box Patent Application Commissioner for Patents Washington, DC 20231

PRELIMINARY AMENDMENT

Commissioner:

Prior to examination, please first amend the above-identified application as follows:

In the Specification:

Please replace the paragraph beginning at page 1, line 4, under the section "Cross Reference to Related Applications" with the following rewritten paragraph:

-- This application is a continuation of co-pending U.S. Patent Application No. 09/632,387; which is a continuation of U.S. Patent Application No. 09/291,823, filed April 14, 1999, and issued as U.S. Patent No. 6,171,577; which application is a continuation application of U.S. Patent Application 08/690,184, filed July 26, 1996, and issued as U.S. Patent No. 5,968,477. --

In the Claims:

Please cancel claims 2-65 without prejudice.

Please add the following new claims 66 to 77:

- 66. (New) A modified annexin suitable for direct radiolabeling, comprising an annexin modified to provide an accessible sulfhydryl group which is capable of participating in the complexation of a radionuclide.
- 67. (New) The modified annexin of claim 66, wherein the modification of the annexin comprises an amino acid extension at the N-terminus, said amino acid extension comprising the accessible sulfhydryl group.
- 68. (New) The modified annexin of claim 67, wherein the sulfhydryl group is within ten amino acids from the N-terminus.
- 69. (New) The modified annexin of claim 67, wherein the amino acid extension further comprises glycine.
- 70. (New) The modified annexin of claim 67, wherein the accessible sulfhydryl group is provided by cysteine.
- 71. (New) The modified annexin of claim 70, wherein the amino acid extension further comprises glycine.
- 72. (New) The modified annexin of claim 67, wherein the annexin is annexin V.

- 73. (New) The modified annexin of any one of claims 66-72, wherein the modified annexin further comprises a radionuclide complexed directly to the modified annexin.
- 74. (New) The modified annexin of claim 73, wherein the radionuclide is a diagnostic radionuclide.
- 75. (New) The modified annexin of claim 73, wherein the radionuclide is F-18, Cu-64, Cu-67, Re-186, Re-188, Pd-100, Pd-109, Bi-212, Pb-212, Ga-67, Ga-68, Tc-99m, Tc-94, Ru-95, Ru-105, Rh-99, Rh-105, In-111, I-123, I-125, Sm-153, Lu-177, Lu-170, Pt-189, Pt-193, Au-199 or Hg-197.
- 76. (New) The modified annexin of claim 75, wherein the radionuclide is Cu-64, Cu-67, Re-186, Re-188, Pd-100, Pd-109, Bi-212, Pb-212, Ga-67, Ga-68, Tc-99m, Tc-94, Ru-95, Ru-105, Rh-99, Rh-105 or In-111.
- 77. (New) The modified annexin of claim 76, wherein the radionuclide is Tc-99m.

REMARKS

Claims 2-65 have been cancelled without prejudice. New claims 66-77 have been added by this Preliminary Amendment. Claims 66-77 find support, for example at pages 10, 11, 12, 29, 45, 52, 55 and 56. No new matter has been added. Therefore, claims 1 and 66-77 are now pending in the subject application.

As set forth in the revised Cross Reference to Related Applications above, the earliest application to which the subject application claims priority is U.S. Patent Application No. 08/690,184, which is a continuation-in-part application filed July 26, 1996.

Favorable consideration on the merits is respectfully requested. If the Examiner has any specific questions relating to this application, he or she is respectfully requested to contact the undersigned.

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Respectfully submitted,

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